

Janice K. Brewer
Governor



Brian C. McNeil
Director

ARIZONA DEPARTMENT OF ADMINISTRATION

OFFICE OF THE DIRECTOR

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August 14, 2014

Mr. Brian C. McNeil, Director
Arizona Department of Administration
100 N. 15th Ave.
Phoenix, AZ 85007

Dear Brian:

In response to the **Amended** Project Investment Justification (PIJ) for the "**Centralized Cloud Security Management**" project, my staff has reviewed your proposal to acquire and implement additional security protections and management services in the cloud.

The original PIJ implied funding was available from the Fiscal Year 2014 (FY14) Automation Projects Fund (APF) in the amount of \$650.0 thousand for the total three-year life cycle cost of the project. The amended PIJ implies additional funding is available from the FY15 APF for a total four-year life cycle cost for the project of \$1,065.0 thousand.

This is notification of Arizona Strategic Enterprise Technology Office's recommendation to the Information Technology Authorization Committee (ITAC) for **Approval with Conditions** of the **Amended** technology project as follows:

1. Should there be a change in the proposed costs of 10% or more, the Security, Privacy and Risk (SPR) team within ADOA-ASET must amend the PIJ to reflect the changes and present it to ITAC for review and approval prior to further expenditure of funds.

The ITAC is scheduled to meet on August 27, 2014 to review this project. Should the ITAC approve the project, you may then proceed to secure additional approvals as required from the Joint Legislative Budget Committee, the Office of Strategic Planning and Budgeting, and the State Procurement Office.

Best Wishes,

A handwritten signature in blue ink, appearing to read "A. Sandeen".

Aaron V. Sandeen
State CIO and Deputy Director
Arizona Strategic Enterprise Technology (ASET) Office

jc

cc: Mike Lettman, ADOA-ASET
Nancy Brister, ADOA-ASET

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Andrew Smith, JLBC
John Arnold, OSPB
Barbara Corella, SPO
Phil Manfredi, ADOA-ASET
Jeffrey Crane, ADOA-ASET

ASET# AD14010_A

Analyst: Jeffrey Crane

PIJ Summary – ASET

Project Number: AD14010_A

Agency Name & Address	Contact Name & Phone
Arizona Department of Administration 100 N. 15 th Ave. Phoenix, AZ 85007	Mike Lettman 602-542-0030 Mike.Lettman@azdoa.gov
Project and Investment Justification Name	Date Submitted
Centralized Cloud Security Management	November 22, 2013 (original date) August 6, 2014 (amended date)

Project Overview

Problem Description

The Arizona Department of Administration's Arizona Strategic Enterprise Technology Office (ADOA-ASET) has adopted a "Cloud First" strategy for migrating applications and service offerings from the State Data Center (SDC) to vendor-hosted "cloud" computing networks. As more service offerings are moved to the cloud, ADOA-ASET must ensure that Federal Risk and Authorization Management Program (FedRAMP) and National Institute of Standards and Technology (NIST) recommended security controls are in place to provide the appropriate levels of protection for State applications and data. In direct support of this strategy, ADOA-ASET is also looking to utilize cloud-based services to provide security-related functions currently managed by the Security, Privacy and Risk (ASET/SPR) team.

Solution

In alignment with strategic goals, ADOA-ASET is proposing to provide additional security protections for State data and applications running in the cloud environment, and also to migrate core security management functions to the cloud. In partnership with other State agencies, ADOA-ASET will research, evaluate and select cost-effective solutions that are capable of providing FedRAMP and NIST-recommended security controls in the cloud. Once selected, ADOA-ASET will implement the proposed solutions to provide required protections for State applications and data residing in the cloud environment. Based on technology currently in use and options available, ADOA-ASET is also proposing to provide security-related management services and enhanced business continuity through robust, cloud-based offerings.

In FY14, ADOA researched and selected leading-edge technologies to establish web application firewalls, cloud firewalls, and web content filtering solutions. Additionally, ADOA recommended appropriate levels of security as new applications and services were added to the cloud environment. ADOA is now proposing to utilize remaining FY14 and new FY15 Automation Projects Fund (APF) monies to identify and expand the implementation of cloud application protections to other State agencies and entities. This includes the licensing of web application firewalls, cloud firewalls, and web content filtering technologies. ADOA will continue to utilize vendor-provided security management services as new applications and services are added to the cloud environment.

Measurements and Deliverables

In this project, ADOA-ASET is proposing to utilize Fiscal Year (FY14) transformation initiative funding to provide additional security protections and management services in the cloud.

Cloud Application Protections

Given this rapidly evolving technology, ADOA-ASET will research available options and implement vendor solutions that follow FedRAMP guidelines and provide NIST-recommended security controls in the cloud environment. Technologies to be addressed include:

- Cloud Security Proxy Services
- Cloud Encryption and Firewall Protections
- Cloud Content Filtering

Once requirements have been identified, a group of leading-edge technologies that can provide the required controls will be selected based on the Gartner Magic Quadrant®. Leading Magic Quadrant® vendors on State contract will be asked to provide demonstrations of their proposed solutions to help further define business requirements and selection criteria. Based on this analysis, the State's Chief Information Security Officer (CISO) will recommend solutions to the State Chief Information Officer (CIO) for approval. Once approved, deployment will be based on identified cloud environment security requirements. Development costs have been estimated and reflect a three (3) year up-front license for the proposed solutions, to be evaluated for renewal or replacement prior to license expiration.

Cloud Security Management Services

ADOA-ASET will acquire vendor-hosted services to provision security-related management functions in the cloud environment. Professional contract support services will also be acquired to assist with the configuration and migration of current services into production. Services to be migrated include:

- Remote Desktop Services
- Secure File Transfer Services
- Configuration Management Software
- Active Directory Controllers
- Lightweight Directory Access Protocol
- Dynamic Host Configuration Protocol
- Internal Domain Name Services

Estimated costs in the PIJ reflect one (1) year of licensing for the security management services to be provisioned in the cloud, however ADOA-ASET expects that current operational funding will be sufficient to cover ongoing operating expenses for these service offerings.

With this amendment, ADOA proposes to implement the following in FY15:

- ***Complete the purchase, installation, and implementation of the web content filtering solution within ADOA***
- ***Evaluate and prioritize risks to select additional agencies within which to expand cloud application protection solutions***
- ***Acquire and implement cloud application protection solutions in selected State agencies and entities***
- ***Continue vendor-hosted services to provision security-related management in the cloud environment established in FY14***

The project will require an end date extension, to allow time to acquire and implement the solutions.

Benefits

Implementation of comprehensive and up-to-date firewall security devices and software will While implemented initially to protect and enable services that ADOA is migrating to the cloud, the selected technologies are expected to provide the foundation for cost-effective

implementations within other State agencies. This project will enhance services, reduce costs, avoid problems, and mitigate risks by:

- Providing additional security protections in the cloud environment
- Implementing technology solutions with improved sustainability
- Bringing business continuity, flexibility, and reliability through cloud-based services
- Implementing equivalent security for service offerings migrated to the cloud

This will allow ADOA to extend cloud application protections and security management services in the cloud environment as part of its strategic goals.

Project Management

The ADOA-ASET Project Manager will work with subject matter experts from the ASET/SPR and Enterprise Capabilities and Delivery (ASET/ECD) teams, along with other participating State agencies, to complete the project deliverables.

Enterprise Architecture

Compliant.

Original Summary of Proposed Costs

<i>All Figures in Thousands (\$000)</i>						
<i>Cost Description</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>Total</i>
Development Costs	650.0	0.0	0.0	0.0	0.0	650.0
Operational Costs	0.0	0.0	0.0	0.0	0.0	0.0
Total Project Costs	650.0	0.0	0.0	0.0	0.0	650.0

Amended Summary of Proposed Costs

<i>All Figures in Thousands (\$000)</i>						
<i>Cost Description</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>Total</i>
Development Costs	650.0	415.0	0.0	0.0	0.0	1,065.0
Operational Costs	0.0	0.0	0.0	0.0	0.0	0.0
Total Project Costs	650.0	415.0	0.0	0.0	0.0	1,065.0

Recommendation: Approval with Conditions

1. Should there be a change in the proposed costs of 10% or more, the Security, Privacy and Risk (SPR) team within ADOA-ASET must amend the PIJ to reflect the changes and present it to ITAC for review and approval prior to further expenditure of funds.